

REMARKS

The Applicants appreciate the thorough examination of the present application as evidenced by the Office Actions of May 17, 2004, and October 25, 2004. In particular, the Applicants appreciate the indication that Claims 2-6, 8-18, and 48 would be allowable if rewritten in independent form and that Claims 19-26, 43, 46, and 47 are allowed. The Applicants also appreciate the withdrawal of all rejections based on U.S. Patent No. 6,544,376 and U.S. Publication No. 2002/0172969.

In response, the Applicants have amended Claim 44 to depend from Claim 23 thereby overcoming all claim objections. The Applicants will also show in the following remarks that U.S. Patent No. 4,496,416 to Machler *et al.* (Machler) fails to teach or suggest the recitations of Claim 1 and that Claim 1 is thus patentable.

Accordingly, the Applicants respectfully submit that all pending claims are in condition for allowance. A Notice of Allowance is thus respectfully requested in due course.

All Claim Objections Have Been Overcome

Claim 44 has been objected to as being of improper dependent form because Claim 44 is a duplicate of Claim 26. In response, Claim 44 has been amended to depend from Claim 23 which has been allowed. Accordingly, all objections to the claims have been overcome.

Entry of this amendment after final is respectfully requested as narrowing issues for further consideration. Moreover, no new issues are raised by this amendment because Claim 44 has been amended to depend from a claim that has been allowed.

Claim 1 Is Patentable Over Machler

Claim 1 has been rejected under 35 U.S.C. Sec. 102(b) as being anticipated by Machler. In particular, Claim 1 recites a method of positioning a component on a substrate, the method including:

providing a liquid material on the substrate adjacent the component such that the component has a first position relative to the substrate; and

changing a property of the liquid material while in a liquid state to move the component from the first position relative to the substrate to a second position relative to the substrate while the liquid material is maintained in a liquid state.

In re: Glenn A. Rinne et al;
Serial No. 10/008,466
Filed: November 9, 2001
Page 9

The Applicant respectfully submits that Claim 1 is patentable over Machler for at least the reasons discussed below.

In support of the rejection of Claim 1, the Office Action states that:

Machler teaches a method of positioning a component (lens) on a substrate by providing a liquid material to the substrate at a first position and changing a property of the liquid while in a liquid state to move the component to the desired second position while in the liquid state (abstract and col 2 lines 7-28). The liquid is an adhesive or solder (col 2 lines 47-55) which is solidified by heat curing (col 2 lines 8-22). In a soldering process, the liquid would solidify on cooling. The volume of the liquid material changes slightly (abstract, col 6 line 60 – col 7 line 30 and claim 2). See also Machler claims 1-4 and 7-10.

Machler, however, teaches away from changing a property of a liquid material to move a component while the liquid material is maintained in a liquid state. In particular, Machler states that:

The object is achieved by the invention in the manner that the optical component or its mount is connected to the optical instrument chassis or body during the adjusting process only by an adjusting device which is not part of the instrument, that after the adjusting process the optical component or its mount is firmly attached to the instrument by a solidifying substance, and that thereupon the adjusting device is removed.

For the attaching of the optical component or its mount to the instrument there are preferably used liquid or pasty substances which solidify with little change in volume and therefore remain dimensionally stable. (Underline added.)

Machler, col. 2, lines 8-20. (Underline added.). Solidification with little change in volume is also discussed in Machler at lines 5-7 of the abstract; at lines 1-4 of column 7; and at claim 2. In each instance that Machler discusses a change in volume, the change in volume is discussed in the context of solidification of a liquid or pasty substance. Accordingly, Machler teaches away from changing a property of a liquid material while in a liquid state to move a component while the liquid is maintained in the liquid state.

Machler also teaches away from changing a property of a liquid material to move a component. In contrast to the recitations of Claim 1, Machler uses an adjusting device (such as manipulator 13) which is subsequently removed. Accordingly, adjustment is performed by an adjusting device as opposed to a liquid. Moreover, Machler teaches away from changing a property of a liquid material to move a component because Machler explicitly discusses use of a

In re: Glenn A. Rinne et al;
Serial No. 10/008,466
Filed: November 9, 2001
Page 10

liquid or pasty substance that solidifies with little change in volume so that the optical component remains dimensionally stable.

In Section 4, the Final Office Action states that:

Regarding applicant's argument that Machler teaches away from changing a property of liquid material, see the abstract and claim 2, which teach a slight change in volume.

The Applicants respectfully maintain, however, that Machler teaches away from changing a property of a liquid material to move a component while maintaining the liquid material in a liquid state because:

- (1) in Machler, the slight change in volume occurs when a liquid substance solidifies (*see, Machler, Abstract*), as opposed to maintaining the liquid material in a liquid state;
- (2) in Machler, liquid substances are used which solidify with little change in volume and therefore remain dimensionally stable (*see, Machler, col. 2, lines 17-20*) as opposed to changing a property of a liquid material to move a component; and
- (3) in Machler, an optical component is moved using an adjusting device such as manipulator 13 (*see, Machler, col. 5, lines 1-12*).

Machler thus teaches away from the recitations of Claim 1.

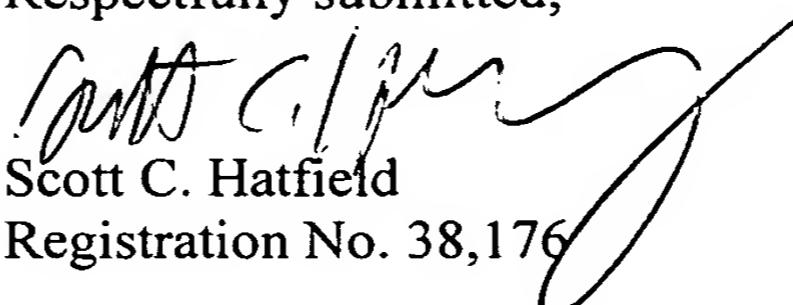
Accordingly, the Applicants respectfully submit that Machler fails to teach or suggest the recitations of Claim 1, and that Claim 1 is thus patentable over Machler. In addition, Dependent Claims 2-18, 45 and 48 are patentable at least as per the patentability of Claim 1 from which they depend. Moreover, various ones of these dependent claims are also independently patentable. Claims 2-6, 8-18, and 48, for example, are independently patentable as set forth in Section 6 of the Final Office Action.

In re: Glenn A. Rinne et al;
Serial No. 10/008,466
Filed: November 9, 2001
Page 11

CONCLUSION

Accordingly, the Applicants submit that all pending claims in the present application are in condition for allowance, and a Notice of Allowance is respectfully requested in due course. The Examiner is encouraged to contact the undersigned attorney by telephone should any additional issues need to be addressed.

Respectfully submitted,


Scott C. Hatfield
Registration No. 38,176

Myers Bigel Sibley & Sajovec, P.A.
Post Office Box 37428
Raleigh, NC 27627
Telephone (919) 854-1400
Facsimile (919) 854-1401

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, Washington, DC 20231, on December 22, 2004.

Joyce Paoli
